

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed January 25, 2005. Claims 1-2, 4-17, 19-32, and 34-37 are pending in the Application. Claims 3, 18, and 33 have been withdrawn from consideration. The Examiner rejected Claims 1-2, 4-17, 19-32, and 34-47. Applicants note with appreciation Examiner's approval of the amended specification. Applicants have amended Claims 1, 16, 31, and 46. Applicants submit that no new matter has been added with these amendments. As described below, Applicants believe all claims to be allowable over the cited references. Therefore, Applicants respectfully request reconsideration and full allowance of all pending claims.

**Section 103 Rejections**

The Examiner rejects Claims 1-2, 4-5, 13-14, 16-17, 19-20, 28-29, 31-32, 34-35, 43-44, and 46 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,351,467 B1 issued to Dillon ("*Dillon*") in view of U.S. Patent No. 6,791,981 B1 issued to Novaes ("*Novaes*"). For the following reasons, Applicants respectfully request reconsideration of Claims 1-2, 4-5, 13-14, 16-17, 19-20, 28-29, 31-32, 34-35, 43-44, and 46.

Independent Claim 1, as amended, recites:

A method for authenticated access to multicast traffic, comprising:  
receiving an Internet group management protocol request at an access network router, the request identifying a user requesting to join an IP multicast channel, the IP multicast channel selected from a bundle of IP multicast channels offered as a multicast package on a subscription basis;  
authenticating access privileges of the user to the multicast channel; and  
disallowing the request in response to at least an unsuccessful authentication.

Applicants respectfully submit that the proposed *Dillon-Novaes* combination does not disclose, teach, or suggest each and every limitation recited in Applicants' Claim 1. For example, Applicants respectfully submit that neither *Dillon* nor *Novaes* disclose, teach, or suggest "receiving an Internet group management protocol request at an access network

router, the request identifying a user requesting to join an IP multicast channel,” as recited in amended Claim 1. With respect to the recited “Internet group management protocol request,” the Examiner acknowledges that *Dillon* does not disclose the feature. (Office Action, page 3). Rather, the Examiner relies upon *Novaes* for disclosure of the “Internet group management protocol request.” However, the portion of *Novaes* relied upon by the Examiner merely discloses that a “beacon message [is transmitted] over subnetworks 310, 320, and 330 using the multicast protocol.” (Column 8, lines 39-40, [*sic*]). Although *Dillon* discloses that the “mechanism used to control the distribution of the multicast messages is based on the Internet Group Management Protocol (IGMP) as specified in RFC 1112” (Column 8, lines 40-43), there is no disclosure in *Novaes* that an IGMP request is received that “identif[ies] a user requesting to join an IP multicast channel,” as recited in Claim 1. To the contrary, the “beacon message” is disclosed as comprising “a short status datagram, which is called heartbeat message or beacon status message.” (Column 8, lines 26-28). Thus, the beacon message of *Novaes* is merely a status message. There is no disclosure in *Novaes* of “receiving an Internet group management protocol request at an access network router, the request identifying a user requesting to join an IP multicast channel,” as recited in amended Claim 1.

As a further example of the deficiencies of the *Dillon-Novaes* combination, Applicants respectfully submit that the proposed combination of references also does not disclose, teach, or suggest that “the IP multicast channel selected from a bundle of IP multicast channels offered as a multicast package on a subscription basis,” as recited in amended Claim 1. As discussed in the previous Response to Office Action submitted on August 25, 2004, *Dillon* merely discloses that a user may “subscribe to WebCast Channels of interest,” the content of which is “specified by a WebCast channel definition . . . [that] is predetermined.” With regard to the offered WebCast Channels, *Dillon* further discloses that “a channel is a set of URL data items which a user may be interested in repeatedly accessing.” (Column 7, lines 32-35). More specifically, *Dillon* discloses that “[a] channel ordinarily is a subset of a web site’s content (i.e. a set of web pages) to be periodically extracted from the web site by a web crawler and delivered to subscribing users by

conditional access protected multicast file transfer.” (Column 7, lines 35-39). “Thus, a channel’s content consists of a collection of URL data items, typically all from a single web site.” (Column 7, lines 39-40). To receive the multicast content offered on each WebCast channel, *Dillon* discloses that “a content viewer 58 in the receiver 26 provides the user with the promotional material (i.e. through the Electronic Program Guide (EPG)) that helps the user to determine which channels to subscribe to.” (Column 16, lines 53-57). “[T]he content viewer 58 . . . processes a user’s requests to subscribe to or unsubscribe a channel.” (Column 20, lines 46-49). Thus, the user subscribes to the WebCast channels on a channel by channel basis. The WebCast channels are not bundled and “offered as a multicast package on a subscription basis,” as recited in amended Claim 1.

The deficiencies of *Dillon* are not cured by the combination of *Dillon* with *Novaes*. To the contrary, *Novaes* merely discloses “[a] method for building a hierarchical multicast tree which is centered around a specific node in an Internet Protocol (IP) communications network.” (Abstract). The method of *Novaes* includes “[r]eceiving a configuration file containing a list of all the network addresses of the nodes in a network,” “receiving a number of permissible connections each subnetwork leader node in the network is permitted with other subnetwork leader nodes,” and “establishing a multicast connection between each subnetwork leader node as identified in the configuration file.” (Abstract). Accordingly, there is no disclosure in *Novaes* of an “IP multicast channel selected from a bundle of IP multicast channels offered as a multicast package on a subscription basis,” as recited in Applicants’ Claim 1.

For at least these reasons Applicants respectfully request reconsideration and allowance of Claim 1, together with Claims 2, 4-5, and 13-14, which depend from independent Claim 1.

Independent Claims 16, 31, and 46 recite certain features and operations that are substantially similar to the features of Claim 1. For example, Claim 16 recites “means for receiving an Internet group management protocol request at an access network router, the

request identifying a user requesting to join an IP multicast channel, the IP multicast channel selected from a bundle of IP multicast channels offered as a multicast package on a subscription basis.” As another example, Claim 31 recites “logic operable to receive an Internet group management protocol request for a user to join an IP multicast channel selected from a bundle of IP multicast channels offered as a multicast package on a subscription basis.” Claim 46 recites “authenticating access privileges of a user to the IP multicast channel upon receiving an Internet group management protocol request at an access network router, the request identifying a user requesting to join an IP multicast channel to receive the premium video content, the IP multicast channel selected from a bundle of IP multicast channels offered as a multicast package on a subscription basis.” Accordingly, for reasons similar to those discussed above with regard to Claim 1, Applicants respectfully submit that the proposed *Dillon-Novaes* combination does not disclose, teach, or suggest each and every element recited in Applicants’ Claims 16, 31, and 46. Claims 17 and 19-20, and 28-29 depend directly or indirectly upon Claim 16. Claims 32, 34-35, and 43-44 depend directly or indirectly upon Claim 31. Thus, for the same reasons that independent Claims 16, and 31 are allowable, these dependent claims are also allowable.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 1-2, 4-5, 13-14, 16-17, 19-20, 28-29, 31-32, 34-35, 43-44, and 46.

The Examiner rejects Claims 6-12, 15, 21-27, 30, 36-42, and 45 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of *Dillon, Novaes*, U.S. Patent No. 6,219,790 B1 issued to Lloyd et al. (“*Lloyd*”), U.S. Patent No. 6,446,571 B1 issued to Dynarski et al. (“*Dynarski*”), U.S. Patent No. 6,718,387 B1 issued to Gupta et al. (“*Gupta*”), and U.S. Patent No. 6,026,441 issued to Ronen (“*Ronen*”).

Claims 6-12 and 15 depend from independent Claim 1 and incorporate the features of Claim 1, which Applicants have shown above to be allowable. Claims 21-27 and 30 depend from independent Claim 16 and incorporate the features of Claim 16, which Applicants have

shown above to be allowable. Claims 36-42 and 45 depend from independent Claim 31 and incorporate the features of Claim 31, which Applicants have shown above to be allowable. Applicants respectfully submit that dependent Claims 6-12, 15, 21-27, 30, 36-42, and 45 are allowable at least because of their dependency.

Additionally, Applicants respectfully submit that the proposed combination(s) of references do not disclose, teach, or suggest each and every limitation recited in Applicants' Claims 6-12, 15, 21-27, 30, 36-42, and 45. As examples, Applicants respectfully submit that the proposed combinations of references does not disclose, teach, or suggest the following features recited in Applicants' claims:

- “determining whether the user is logged in to a service provider providing the multicast channel” and “unsuccessfully authenticating access privileges of the user to the multicast channel in response to at least the user not logged in to the service provider,” as recited in Claims 10 and 12 (and similarly recited in Claims 25, 27, 40, and 42; and
- “determining whether the user is logged in to a service including the multicast channel” and “unsuccessfully authenticating access privileges of the user to the multicast channel in response to at least the user not logged in to the service including the multicast channel,” as recited in Claims 11-12 (and similarly recited in Claims 26-27, and 41-42.

With respect to Claims 10-12, 25-27, and 40-42, the Examiner acknowledges that neither *Dillon* nor *Novaes* disclose, teach, or suggest the recited features and operations. Rather, the Examiner relies upon *Ronen*. Applicants respectfully submit, however, that *Ronen* merely discloses a method for “establishing a connection on the Internet between applications associated with two or more client terminals.” (Column 1, lines 7-10). *Ronen* generally discloses that a connection can be established “on the Internet between two client applications on client terminals if the client terminal initiating the connection knows the IP address of the client terminal at the terminating end of the connection.” (Column 1, lines

41-45). Such connections may be established for purposes such as Internet Telephony and teleconferencing. (Column 2, lines 1-3). Because the method disclosed in *Ronen* allows an “initiating first user at a client terminal . . . to establish a connection over the Internet with a destination user’s client terminal [by using[ the destination user’s e-mail address (mary@def.com) to determine the domain name of that user’s [Internet Access Service Provider (IASP)] (def.com)” (Column 2, lines 3-8), *Ronen* dispenses with the requirement that the initiating user know the IP address of the destination client.

Specifically, “[w]hen the [destination] user of client terminals 101 logs onto the Internet through IASP 102, and provides his or her identity through a logon and identification procedure, [destination] client terminal 101 is assigned a temporary IP address that is used for the current session.” (Column 2, lines 54-58). “Thus, a database 122, associated with IASP 102, stores a mapping of each client terminal then connected to IASP 102 and its user, and the IP address assigned to that terminal.” (Column 2, lines 58-61). When a initiating user then “wishes to establish a connection over the Internet with [the] destination user’s client terminal . . . a domain name server (DNS) is queried to obtain the IP address of that IASP.” (Column 2, lines 3-10). “The client terminal of the initiating user then sends a query to that IASP’s IP address to obtain the IP address that that IASP has currently assigned to the destination user (mary).” (Column 2, lines 10-13). “If that second user is logged on, an entry will exist in a database at the destination user’s IASP that associates that user (mary) with the IP address assigned by the IASP to that user’s client terminal for the current session.” (Column 2, lines 13-17). Thus, by accessing its associated database, IASP 102 “can determine whether a particular one its subscribers is currently logged on.” (Column 2, lines 64-66). “If the destination user is logged on, the application running on the initiating user’s client terminal then establishes a connection over the Internet to the destination user’s client terminal using the determined IP address.” (Column 2, lines 21-25). Accordingly, the *Ronen* system is merely used to identify an IP address such that a communication session can be established between two client terminals associated with different end users. Because *Ronen* is not at all related to providing multicast communications, *Ronen* does not disclose, teach, or suggest determining whether the user is logged in to a service and/or service

provider providing the multicast channel and then unsuccessfully authenticating access privileges of the user to the multicast channel in response to at least the user not logged in to the service and/or service provider,” as recited in Claims 10-12, 25-27, and 40-42. The recited features are completely absent from the disclosure of *Ronen*.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 6-12, 15, 21-27, 30, 36-42, and 45.

The Examiner rejects Claim 47 under 35 U.S.C. § 103(a) as being unpatentable over *Gupta* in view of *Ronen* and *Novaes*.

First, assuming for the purposes of argument only that the proposed combination of *Gupta*, *Ronen*, and *Novaes* discloses the features of Claim 47 (which Applicants dispute below), the rejection of Claim 47 is improper at least the Examiner has not sufficiently shown that one of ordinary skill in the art at the time of invention would have been motivated to make the proposed combination. The mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). The showing must be clear and particular. *See, e.g., C.R. Bard v. M3 Sys., Inc.*, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998). The Examiner has not provided adequate evidence that one of ordinary skill in the art at the time of the present invention would have been motivated to modify the load-balancing system disclosed in *Gupta* to include the authentication procedures disclosed in *Ronen* and the Internet group management protocol disclosed in *Novaes*. The Examiner merely speculates “it would have been obvious” to modify the load-balancing system of *Gupta* to include the teachings of *Ronen* “because by ensuring that the user is logged on and that it is a known user, it enhances security so that a third party does not try and intercept services.” (Office Action, page 8). With respect to *Novaes*, the Examiner speculates that “it would have been obvious” to modify *Gupta* to include the teachings of *Novaes* “because multicast datagrams are only received if specific group subscriptions exist in a node to keep the

overhead of the beacon program to a minimum.” (Office Action, page 12). The Examiner’s speculation, however, does not provide the suggestion or motivation required to make the proposed combination and instead simply relies upon hindsight.

It is improper for an Examiner to use hindsight having read the Applicants’ disclosure to arrive at an obviousness rejection. *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). In particular, it is improper to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). Because the Examiner has merely used Applicants’ claims as an instruction manual to piece together the load-balancing system disclosed in *Gupta* with the authentication procedures disclosed in *Ronen* and the Internet group management protocol disclosed in *Novaes*, Applicants respectfully submit that the proposed *Gupta-Ronen-Novaes* combination is improper and should not be used here to reject Applicants’ claim.

Furthermore, Applicants respectfully submit that one of ordinary skill in the art at the time of invention would not have been motivated to make the proposed *Gupta-Ronen-Novaes* combination. *Gupta* discloses a routing process for reallocating address spaces of a plurality of servers using a load balancing policy and a multicast channel. (Title). The objective as disclosed in *Gupta* is to provide a routing process by which network resources may be obtained from web servers on networks “hampered by congestion and bottlenecks.” (Column 1, lines 53-56). More specifically, *Gupta* provides “a simple general purpose interface that works across a spectrum of varying user needs . . . [without] unreasonably increas[ing] the overhead for setting up and operating the multicast for users who would like to continue to set up simple open meetings.” (Column 12, lines 5-10). Because open meetings are just that - open to all users of the multicast network - one of ordinary skill in the art would not have been motivated at the time of invention to combine the load balancing policy of *Gupta* with the authentication procedures disclosed in *Ronen* and the Internet group management protocol disclosed in *Novaes*.



Second, Applicants respectfully submit the proposed *Gupta-Ronen-Novaes* combination does not disclose, teach, or suggest each and every limitation recited in Applicants' Claim 47. For example, Claim 47 recites "receiving an Internet group management protocol request at an access network router, the request identifying a user requesting to join an Internet protocol (IP) multicast channel." The Examiner specifically relies upon *Novaes* for disclosure of the recited features. Applicants have shown above with respect to Claim 1, however, that *Novaes* does not disclose, teach, or suggest the recited "Internet group management protocol request." Rather, *Novaes* merely discloses that a "beacon message [is transmitted] over subnetworks 310, 320, and 330 using the multicast protocol." (Column 8, lines 39-40, [sic]). Although the "mechanism used to control the distribution of the multicast messages is based in the Internet Group Management Protocol (IGMP) as specified in RFC 1112" (Column 8, lines 40-43), there is no disclosure in *Novaes* that an IGMP request is received that "identif[ies] a user requesting to join an Internet protocol (IP) multicast channel," as recited in Claim 47. To the contrary, the "beacon message" is disclosed as comprising "a short status datagram, which is called heartbeat message or beacon status message." (Column 8, lines 26-28). Thus, the beacon message of *Novaes* is merely a status message. Accordingly, for reasons similar to those discussed above with regard to Claim 1, there can be no disclosure in the proposed *Gupta-Ronen-Novaes* combination of "receiving an Internet group management protocol request at an access network router, the request identifying a user requesting to join an Internet protocol (IP) multicast channel," as recited in Claim 47.

As another example of the deficiencies of the proposed *Gupta-Ronen-Novaes* combination, Applicants respectfully submit that the proposed combination does not disclose, teach, or suggest "determining whether the user is logged in to a service provider providing a service including the IP multicast channel" or "determining whether the user is logged in to the service including the IP multicast channel" and "unsuccessfully authenticating access privileges of the user to the IP multicast channel in response to at least one of determining the user is not logged in to the service provider and determining the user is not logged in to the service," as recited in Claim 47. With respect to the above recited features and operations,

the Examiner specifically relies upon the disclosure of *Ronen*. Applicants have shown above with respect to Claims 10-12, 25-27, and 40-42, however, that *Ronen* does not disclose, teach, or suggest the recited features and operations. To the contrary, *Ronen* merely discloses a method for “establishing a connection on the Internet between applications associated with two or more client terminals” and is not at all related to the provisioning of multicast communications. (Column 1, lines 7-10). Accordingly, for reasons similar to those discussed above with regard to Claims 10-12, 25-27, and 40-42, Applicants respectfully submit that the proposed *Gupta-Ronen-Novaes* combination does not disclose, teach, or suggest each and every limitation recited in Claim 47.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 47.

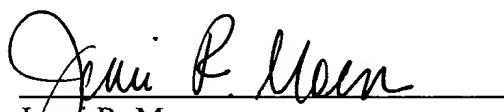
**CONCLUSION**

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Jenni R. Moen, Attorney for Applicants, at the Examiner's convenience at (214) 953-6809.

Applicants do not believe any fees are due. However, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,  
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